

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated August 5, 2003. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 35-40 are under consideration in this application. Claim 35 is being amended, as set forth in the above marked-up presentation of the claim amendments, in order to more particularly define and distinctly claim applicants' invention. New claims 37-40 are being added to recite other embodiments described in the specification.

Additional Amendments

The claims are being amended to correct formal errors and/or to better disclose or describe the features of the present invention as claimed. All the amendments to the claims are supported by the specification. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

Prior Art Rejections

Claims 35 and 36 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,643,471 Onishi et al. (hereinafter "Onishi"), and further rejected under 35 U.S.C. 103(a) as being unpatentable over Onishi in view of U.S. Patent No. 6,239,855 to Nakahara et al. (hereinafter "Nakahara"). The prior art reference of U.S. Patent No. 6,292,249 Kane et al. (hereinafter "Kane") was cited as pertinent to the present application. These rejections have been carefully considered, but are most respectfully traversed.

The liquid crystal display device (Figs. 1B, 4A, 11-17), comprises a pair of substrates as disposed to spatially oppose each other with a layer of liquid crystal material interposed

therebetween and a seal material used for adhesion of one of the substrates to a remaining substrate, said seal material also having a function of encapsulating the liquid crystal material. In particular, a plurality of photolithographically formed projection bodies are precisely dispersed (page 9, line 23) on one of said substrates in a predetermined shape thereof (page 8, line 24 – page 9, line 7) at a desired location thereon (page 9, line 7), and then said seal material is formed on said one of said substrates to bury (page 9, line 19) said projection bodies therewithin. In particular, each of the projection bodies **PRO** has (1) a first contacting area with said one of said substrates which the projection bodies formed thereon being **different** from a second contacting area thereof facing the other one of said substrates (claim 35), or (2) has at least one tapered surface extending between said substrates (claim 38) as shown in Figs. 1B, 4A, 11-17.

Each spacer of the invention is photolithographically formed (by selective etching, page 8, line 24 to page 9, line 4) to be precisely so dispersed and buried within said seal material in such a predetermined shape thereof at a desired location on one of the substrates to accommodate different manufacturing processes. For example, the spacer in Fig. 16B has a bigger contacting surface with the substrate it formed on than its contacting surface with the adhesive 30 in a vessel (page 23, 4th paragraph) to ensure that the spacer will not detach from the substrate toward the vessel. As another example, the spacer in Fig. 17B has a bigger contacting surface with the substrate it formed on than its contacting surface with the adhesive 30 on a roller 31 (page 23, 4th paragraph) to ensure that the spacer will not detach from the substrate toward the roller 31.

The spacer 10b of Onishi was relied upon by the Examiner to teach the spacer of the invention. However, it has the same (rather than “different”) size of contacting areas facing both substrates (Fig. 12B).

Nakahara and Kane fail to compensate for Onishi’s deficiencies. In Nakahara, only Fig. 1 discloses that ball-shaped spacer 15 is in-seal spacer (e.g. glass beads, glass fiber, plastic beads, or the like) mixed in the injection seal 14 (col. 8, line 50-51), which connects both substrates at the same size, if at all. In Kane, the spacers in the figures are shaped rectangular such that it shall connect both substrates at the same size.

As such, the present invention as now claimed in independent claims 35 and 38 is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

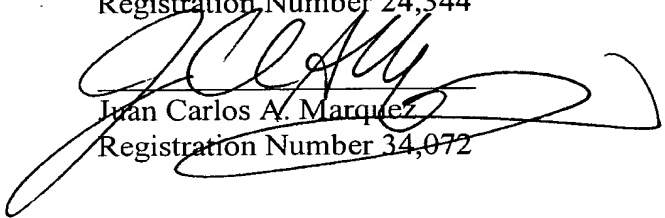
In view of all the above, clear and distinct differences as discussed exist between the

present invention as now claimed and the prior art reference upon which the rejections in the Office Action rely, Applicant respectfully contends that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and phone number indicated below.

Respectfully submitted,

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